DRAFT

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COMMENTS ON THE PRELIMINARY WORKING DRAFT: A12.0 DATA QUALITY OBJECTIVES FOR SITE 12 (SLUDGE DRYING BEDS) [dated 9/9/93]

The following comments do not address grammatical or typographical errors; however these should be corrected in any future versions.

GENERAL COMMENTS:

1. The DQOs for Site 12 do not address the two former impoundments located southeast of Stratum 2; these units were apparently identified in aerial photographs from 1945, 1965 and 1970 (see *Technical Memorandum* comments). All available information, e.g., aerial photographs and MCAS El Toro records/plans, should be reviewed and either the area of the two former units should be added as a separate stratum or a complete, valid justification as to why sampling is not necessary should be presented.

2. The figures depicting COPCs (e.g., Figures A12-2a through c) are inconsistent with COPCs as described in the text (e.g., Section A12.3.1). Figures A12-2a through c do not include PCB results.

   In Figures A12-2a through c, indicate the chemicals that were detected in Phase I that exceed screening criteria (e.g., use an asterisk). These chemicals should be matched to those in Table A12-3a.

3. In Section A12.3.1, COPCs are listed for the upgradient area which exhibited one of the highest detected concentrations for petroleum hydrocarbons (6,770 ppm TRPH). Granted, this apparent contamination appears to be due to oil and is apparently localized to surficial soils. However, after Section A12.3.1, the upgradient area is dismissed without explanation.

4. The Catch Basin is broken out as a separate area for COPCs in Section A12.3.1, but it is unclear if the estimated risk ratios in Table A12-4 for Stratum 3 include results from the Catch Basin; please clarify. The Catch Basin COPCs on page 12-6 should be listed as a subset of Stratum 3.

SPECIFIC COMMENTS:

A12.1 Site Description

1. This section presents a superficial statement that facilities at the WWTP were lined while they were in operation. It is unlikely that this statement is accurate; what is the source of this information? What facilities were lined, the sludge drying beds or other units at the WWTP? If applicable, what was the composition of the liner for the sludge drying beds? Was liner material noted in boring logs? Please provide construction details for the sludge drying beds.

2. PCBs were detected in the Drainage Ditch. The DQOs should include a discussion of SWMU/AOC 7 (PCB Transformer Storage Area) and the location of this area should be identified on a site map. Is it possible that PCB releases from SWMU/AOC 7 contributed to the presence of PCBs in the Drainage Ditch? The Department's comments concerning SWMU/AOC 7 in the Draft RFA Report are repeated below:

> The PR/VSI Report states that one transformer, located near the center of the storage area, leaked oil from a valve onto the unpaved soil. The boring location as indicated in Figure 5 of Appendix B, while located near or within a stain area, is apparently not near the center of the storage area. Was the release from the transformer valve investigated? What is the origin of the stain indicated in Figure 5? Please indicate the extent of the stain in Figure 5 and the location and extent of the leaked oil near the center of the storage area.

The Department finds the response to these comments in the Final RFA Report to be unsatisfactory. <u>The issue of whether SWMU/AOC 7 possibly contributed to the PCB contamination of the Drainage Ditch should be addressed in the DQOs</u>.

A12.3.1 Shallow Soil

1. Define shallow soil (consider RFA sampling depths as well).

2. Have the VOCs and SVOCs listed as COPCs been screened based on laboratory method or trip blanks?

3. Why isn't arsenic and TFH-diesel included here in the COPCs for SWMU/AOC 90 and Boring 265B1 or if applicable, in Section A12.3.2 (Subsurface Soil)? TFH-diesel was found at SWMU/AOC 90 up to 830 ppm. The Department understands that some of these sections marked "DRAFT" may be incomplete. Please change the RFA term "TPH" to "TRPH" for consistency (see bottom of page 12-6).

A12.3.2 Subsurface Soil

1. Please be consistent with terminology, e.g., the use of Stratum 1 or Onsite West.

A12.3.3 Groundwater

1. What about TDS for onsite groundwater?

A12.7 Chemicals To Be Investigated During Phase II, A12.7.1 Shallow Soil and A12.7.2 Groundwater

1. Sections A12.7, A12.7.1 and A12.7.2 should essentially be the same for all of the RI sites. To avoid redundancy, please move these sections before site-specific DQOs. Please note however that while the descriptions in Sections A12.7 and A12.7.1 are applicable to organics found in soil, it does not describe the comparison to background values for inorganics. These sections, changed to generic sections for all RI sites (should include procedures for sediments and surface water), could be strengthened by including details from the position paper **"Chemicals to be Investigated During Phase II, Summary of Selection Procedures"**, dated August 11, 1993 (please be cognizant of any recommended changes requested by regulatory agencies).

   Also in a generic section prior to site-specific DQOs, describe the seven-step process as included in the position paper **"Chemicals to be Investigated During Phase II (Surface Soils)"**, dated August 6, 1993 (again, please be cognizant of regulatory agency comments).

A12.7.1 Shallow Soil

1. This section includes subsurface soil-- it should be renamed or subsurface soil should be addressed in a separate section.

A12.8.1 Shallow Soil

1. This section describes the results of a 1-foot depth surface soil sample (apparently 12_DDX) in the Drainage Ditch which exceeds the LUFT criterion for TFH-diesel. The DQOs should discuss the dimensions of the tar-like substance. What are likely sources of the tar-like substance? Could it be the result of a contractor disposing of roofing tar or a similar material? Please see *Technical Memorandum* comments. Please note that PCBs were also found in the sample and that PCBs were found in other Drainage Ditch soil samples. Based on a cursory review of the data, it appears that the only other significant detections of petroleum hydrocarbons were 700 ppm TRPH at the surface of 12_DD1 and 6,770 ppm TRPH at the upgradient location.

2. A section should be included for subsurface soils. If an evaluation of potential remedial actions is not applicable to subsurface soils at Site 12, then a statement to that effect should be included.

A12.8.2 Groundwater

1. This section does not mention TCE, chloride, sulfate and TDS.

A12.9.1 Shallow Soils

Stratum 1 (West Sludge Drying Beds)

1. This section states that the hazard index is approximately 0.96, yet Table A12-4 indicates the value is actually approximately 0.84.

A12.10.1 Shallow Soils

Stratum 1 (West Sludge Drying Beds) and Stratum 2 (East Sludge Drying Beds)

1. The rationale to collect samples at 5 and 10 foot depths may be unsubstantiated since apparently most of the estimated risk is from surficial contaminants. Instead, information on the depth and construction of the former sludge beds should be thoroughly reviewed. This information has not been supplied to date. A weak statement was made that facilities at the WWTP were lined, however, see the comment concerning this matter above. The DQO section should discuss the extent of the

research to discover this information, e.g., have foundation plans for the former WWTP been reviewed and do they supply this information? If, after a thorough review of all available information, there is uncertainty concerning the depth and construction of the former sludge beds, then the rationale for discretionary deeper samples should include that a further evaluation to investigate horizons below plowed under sludges is warranted. Please also note that modifications to the proposal should also be made if any information indicates that the former sludge beds were deeper than 10 feet below the current ground surface.

PCBs are driving the risk value for Stratum 2. This is based on a relatively insignificant 0.1 ppm detection at the surface of 12_2SL1. The result is flagged "JN". The "N" flag is not discussed in Section 2.6.2 of the *Technical Memorandum*. The "N" flag normally identifies compounds where one or more of the peaks used for quantitation are more than two times the width of the corresponding peaks in the highest concentration calibration standard. It indicates an uncertainty in the quantitation for the compound. At Stratum 2, surficial field screening techniques for PCBs/pesticides could possibly be substituted for the proposed five borings, with some samples collected at/near the 12_2SL1 location. The Department is concerned, however, about the lack of information for the East Sludge Drying Beds. Every reasonable attempt should be made to identify what activities were actually conducted in this area. The Department may still request that samples be collected from borings at Stratum 2 if other information indicates a likely probability of contamination. Other information includes but is not limited to the discovery of surficial PCB contamination at Stratum 2 during Phase II, the discovery of additional contamination at Stratum 1 or new information derived from the investigation of the depth and construction of the sludge drying beds.

2. Analyses for metals and cyanide should be added for Stratum 1.

Stratum 3 (Drainage Ditch) [and Catch Basin?]

1. Field screening for inorganics is limited to lead. What portion of the estimated risk ratio in Table

A12-4 is due to lead? Please indicate this information in the text.

2. Discuss why TPH and TRPH are not included in analyses (consider 1,970 ppm TFH-diesel & 42,529 ppm TRPH in 12_DDX and 700 ppm TRPH at 12_DD1).

3. Contaminants appear to be surficial; the 10 foot samples may only be necessary if contamination is discovered at the 5 foot depth horizon.

4. Discuss management of the tar like substance area.

SWMU/AOC 90 (Former Waste Water Treatment Plant)

1. Analyses for metals and cyanide should be added.

2. The Department does not necessarily agree with the rationale that the most likely leaks at the WWTP were from valves and lines. It is likely that tanks, some of which were likely inground tanks, may have leaked. A section should describe the influent pathway to and through the WWTP. The location of the wet well should be identified. Please indicate how the wet well was constructed. A judgmental sample(s) in the former wet well location is/are recommended (pending construction details). As stated in the Department's *Technical Memorandum* comments, judgmental soil samples located beneath former WWTP units, especially primary units were probable hazardous waste levels were highest, are recommended. More than 3 samples may be required. Information on the depth of the former WWTP units should be thoroughly reviewed. The DQO section should discuss the extent of the research to discover this information, e.g., have plans for the former WWTP been reviewed and do they supply this information?

   Moreover, it appears the surface elevation of the SWMU/AOC 90 area may have been raised. The area is level with South Marine Way but is higher than other surrounding areas. Was this area built-up with fill material? If so, how high above the former WWTP surface elevation? Will 10 foot deep soil samples be adequate to characterize this area, i.e., will the 10 foot samples be located below former WWTP units?

3. A figure should be included for SWMU/AOC 90 to

indicate the chemicals of potential concern. This figure should be similar, e.g., to Figure A12-2a for Stratum 1.

A12.10.3 Groundwater

1. Compared to the semi-upgradient well 12_UGMW31 and well 18_PS1, well 12_DBMW48 near the center of Stratum 1 does exhibit slightly higher concentrations of PCE in the same permeable zone (based on both round one and two results except for 18_PS1 which was not sampled in round one). TCE does not exhibit the same trend. With the additional information from round two results, it does not seem likely that Site 12 is a contributor to the chlorinated VOC plume.

   The Department recommends that additional well installation at Site 12 be on a contingent basis, i.e., justification of additional wells should be supported by other needs or information such as monitoring requirements, soil gas survey results (if so performed) or Phase II investigation results. For example, the JMM Report *MCAS El Toro Off-Station Remedial Investigation Final Work Plan* dated March 1990 suggests that, based on a soil gas investigation, shallow PCE soil contamination may exist east of and immediately adjacent to Bee Canyon Wash. New soil gas survey results may indicate the need for a true downgradient well at Site 12.

   Please note that well 18_BGMW04B is one of the few on-Station wells that exhibited chlorinated VOC contamination in the second (?) permeable zone. For the most part, groundwater on-Station appears to be confined to the uppermost permeable zone. Please evaluate this observation; is it likely a downward migration effect due to pumping activities further to the west?

Figure A12-1a

1. Indicate the dimensions of the tar-like substance found in the Drainage Ditch.

Figure A12-1b

1. How was the wastewater influent line connected to the WWTP? This figure does not indicate the connection. Indicate the location of the wet well and the direction of influent flow throughout the WWTP (apparently there was an old and a new system).

Is it likely that the wastewater influent line would be located under the Trickling Filter (see figure)?